Peabody, Daniel (EGLE)

From:	Peabody, Daniel (EGLE)
Sent:	Tuesday, October 13, 2020 9:41 PM
To:	saric.james@epa.gov; Von Wallmenich, Theo/DET
Cc:	Roberts, Keegan; Walczak, Joseph (EGLE); Ruhala, Sydney (EGLE); Bennett, Brian; Williams, Lisa
Subject:	EGLE Comments on OU5 Area 1 Crown Vantage Side Channel RA Document Set #2
Attachments:	Kalamazoo River_OU5 Area 1_CVSC RA_SESCP_FINAL_comments.pdf; Kalamazoo River_OU5 Area 1_CVSC RA_HASP_FINAL_comments.pdf; Kalamazoo River_OU5 Area 1 _CVSC RA_DBP_FINAL_comments.pdf; Kalamazoo River_OU5 Area 1_CVSC RA_FSP_FINAL_comments.pdf

Jim,

Attached are comments on the second set of RA work plan submittals for the CVSC. Please let me know if you have any questions.

Thanks,

Daniel Peabody
Environmental Quality Analyst
Remediation and Redevelopment Division
Michigan Department of Environment, Great Lakes, and Energy
***517-285-3924* NEW PHONE NUMBER**| PeabodyD@Michigan.gov
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Area 1 Crown Vantage Side Channel Remedial Action Work Plan
Soil Erosion and Sedimentation Control Plan
September 2020

GENERAL COMMENTS

Commenting Organization: EGLE **Commenter:**
General Comment #1: Because work is being conducted during the winter months and restoration of many locations won't begin until the following spring and be completed until late 2021, EGLE has concerns that the changing weather conditions (specifically, increases in precipitation and river flow) may create erosion and sedimentation issues at the site. SESC controls will need to be routinely inspected and maintained throughout the duration of work including during winter and spring months when limited site activities are ongoing, during long-term shutdowns, following high flow events, etc.

Commenting Organization: EGLE **Commenter:**
General Comment #1: Will any erosion control mat (ECM), erosion fabrics (in this SESC Plan or other work plans), or other construction materials potentially injure, trap, or kill native wildlife? In the past, the Natural Resource Trustees advocated for the use of nonwelded, photo-biodegradable mesh for erosion control to prevent harming native wildlife. If proposed ECMs, erosion fabrics, or other construction materials may negatively impact wildlife is there an alternative, cost-effective and equivalent material that does not and could be used? Outside of this instance are there other materials proposed that should also be reviewed for their potential impact on wildlife?

SPECIFIC COMMENTS

Commenting Organization: EGLE **Commenter:**
Section: 3.3 **Page #: 3-2**
Specific Comment #1: Section 3.3, under Permanent Seeding, states that "Permanent seeding will not be considered established for at least 1 full year from the time of planting. During that year, the seeding will be inspected for soil erosion or plant loss." Please specify at what frequency inspections will be completed during the 1-year period and if inspection reports will be submitted to the agencies.

Commenting Organization: EGLE **Commenter:**
Section: N/A **Page #: N/A**
Specific Comment #2: Please include the name(s) of the certified storm water operator(s) and the associated certification number(s) in the work plan.

SPECIFIC COMMENTS

Commenting Organization: EGLE **Commenter:**
Section: Table 8.1 Page #: 20
Specific Comment #1: The contact information for the EGLE Project Manager is incorrect. Please change the listed phone number to "517-285-3924". Further, the table states "MDEQ Project Manager." Please change this to "EGLE Project Manager."

Kalamazoo River Superfund Site
Area 1 Crown Vantage Side Channel Remedial Action Work Plan
Field Sampling Plan
September 30, 2020

GENERAL COMMENTS

Commenting Organization: EGLE **Commenter:**
General Comment #1: The text describes two exceptions to the Post-Dredge Management Decision Tree: if a high subgrade or high bottom (coarse sand and gravel occur within the dredge cell, or if a full 0-12" confirmation core cannot be collected.

Encountering the more coarse, underlying substrate within the side channel should not be used as the sole line of evidence to determine when dredging is complete. See General Comment #2 on the Area 1 Crown Vantage Side Channel Final Design Approval letter. The decision tree (Figure 4.1) describes "hard pan/refusal", which is different than "coarse sand and gravel". Excavation should continue until hard pan/refusal is encountered or other "off ramp" metrics in the decision tree have been met. If the substrate is used as a line of evidence to abort dredging, sample aliquot(s) should be collected from the subareas that are "cleared" because they are composed of sand or sandy gravel (if possible), even if the core is unable to advance the full 12".

The work is being done primarily using long stick excavators that are equipped with RTK GPS units and software that, according to the Dredging and Backfill Plan, provides sub tenth elevation accuracies vertically and horizontally in real-time to the operator. That type of equipment allows for precision cuts to be made. Is a full 12" core necessary based on the precision and accuracy of the equipment that is being utilized?

Commenting Organization: EGLE **Commenter:**
General Comment #2: How is high subgrade going to be mapped? High subgrade is listed as a scenario for removal of aliquots from confirmation sampling, however there is no plan for mapping these areas. Prior to removal of a sample aliquot a reasonable attempt should be made to locate suitable locations in the dredge cell sub area. There should be a protocol for finding a suitable location, that includes probing and identification of remaining sediment thickness throughout the sub areas.

Commenting Organization: EGLE **Commenter:**
General Comment #3: Three attempts at collection of a 1-ft core is insufficient based on the amount of time it takes to collect such a small sample. EGLE recommends that this be revised to six (6) attempts at each aliquot or to allow for shorter intervals to be accepted pending acceptance by EPA. Additionally, see General Comment #2 regarding mapping subgrade.

Commenting Organization: EGLE **Commenter:**
General Comment #4: Add a section in this FSP related to split sampling and rationale for locations to be split for EPA and EGLE. How will split samples be utilized in the decision process?

SPECIFIC COMMENTS

Commenting Organization: EGLE **Commenter:**
Section: 2.0 **Page #: 2-1**
Specific Comment #1: Section 2.0 states that "…each of the five 12-inch core sample aliquots will be collected randomly from each subarea; therefore, the final five random aliquot locations will be determined in the field." Please specify how these locations will be randomly selected. Discuss the process for randomizing the samples and if any engineering judgment will be included in the selection process. Also indicate how this randomization will account for specific pockets of known high subgrade if encountered. Figure 2-1 shows confirmation sampling locations for each cell in the DMUs. Will the field staff try to collect confirmation samples at these locations and move if required due to an obstruction, refusal, etc.?

Commenting Organization: EGLE **Commenter:**
Section: 2.0 **Page #: 2-1**
Specific Comment #2: The text defers the number of dredge cells to the Dredge and Backfill plan. However, the dredge and backfill plan does not specify the dredge cells or the sub areas. Revise both documents for consistency.

Commenting Organization: EGLE **Commenter:**
Section: 2.0 **Page #: 2-1**
Specific Comment #3: The text states that each dredge cell will be divided into 5 sub areas. Discuss how these will be divided or show on a figure the location of these sub areas.

Commenting Organization: EGLE **Commenter:**
Section: 3.0 **Page #: 3-1**
Specific Comment #4: Provide methodology for collection of sediment cores and a reference to appropriate SOPs. Indicate the acceptance criteria for collection, equipment methods for the confirmation sampling. Specifically, indicate the core acceptance criteria related to material loss and compaction.

Commenting Organization: EGLE **Commenter:**
Section: 4.0 **Page #: 4-1**
Specific Comment #5: The notes accompanying flow chart detail Figure 4-1 points to specific details in Table 10-1 which is not included in this document. Provide the appropriate tables in this sampling plan.

Commenting Organization: EGLE **Commenter:**
Section: 4.0 **Page #: 4-1**
Specific Comment #6: The notes accompanying flow chart detail in Figure 4-1 points to specific details in Table 10-1 which is not included in this document. Or the text could be referencing Table 4-1 which is included. Provide the appropriate table or edit the text.

Commenting Organization: EGLE **Commenter:**
Section: N/A **Page #: N/A**
Specific Comment #7: On September 17, 2020, Wood submitted a slide deck for the Crown Vantage Side Channel Proposed Pilot Study Summary for residuals via email. To date, EGLE

has not received a work plan for this pilot study nor was it discussed in the Field Sampling Plan submitted. Please prepare and submit a formal work plan for this pilot study for review and approval prior to conducting confirmation sampling.

Commenting Organization: EGLE **Commenter:**
Section: Table 4-1 Page #: N/A
Specific Comment #8: What is the minimum number of aliquots that would be acceptable for a composite sample?

Area 1 Crown Vantage Side Channel Remedial Action Work Plan
Dredging and Backfill Plan

GENERAL COMMENTS

Commenting Organization: EGLE **Commenter:**
General Comment #1: A thorough and succinct description of how the proposed bathymetric surveys are going to be conducted (pre- and post-dredging) needs to be provided. How do these methods compare to the method(s) used to collect bathymetry data in the CVSC that was used for the Remedial Design? If sonar surveys are not going to be utilized because of conditions (or for other reasons) a detailed description of how surveys are going to be conducted and repeated needs to be inserted in this document and other sections of the Remedial Action Work Plan (RAWP) and appendices where bathymetry is discussed.

Commenting Organization: EGLE **Commenter:**
General Comment #2: Section 4.5 of the RAWP main text states "Additional details on the planned dredge cells can be found in the Dredge and Backfill Plan" these additional details are missing from this appendix.

Commenting Organization: EGLE **Commenter:**
General Comment #3: Common fill is the proposed material for backfilling. EGLE has concerns this may not be a suitable material for backfill and has several questions about how this material was selected. For example- Will this material provide a suitable and long-term cover for the potentially contaminated materials that are going to be left behind? At what flows is common fill susceptible to erosion within the side channel? What analysis was conducted to evaluate the size of the material needed for backfill?

Commenting Organization: EGLE **Commenter:**
General Comment #4: A field form should be developed that clearly documents how the various criteria were met that incorporates the requirements outlined in the Decision Tree shown in Figure 4.1 in the Field Sampling Plan.

Commenting Organization: EGLE **Commenter:**
General Comment #5: The Dredge and Backfill Plan does not outline or discuss procedures related to dredging multiple cells simultaneously and in different DMUs as indicated in the RAWP. Provide a section in this document related to sequencing and discuss how Forgen plans to manage residuals during this type of operation.

Commenting Organization: EGLE **Commenter:**
General Comment #6: A figure or figures depicting dredge cells and sub areas should be included in the dredge and backfill plan.

SPECIFIC COMMENTS

Commenting Organization: EGLE **Commenter:**
Section: 4.2 **Page #: 4**

Specific Comment #1: Section 4.2 states that "This control grid will be set up on a 5-ft x 5-ft grid pattern throughout the sediment removal area." Please note that during a Crown Vantage Side Channel Remedial Action Progress Call on October 7, 2020, Wood stated that the survey is being conducted with a 10-ft x 10-ft grid pattern instead due to conditions in the field. This modification and reason(s) for the change should be documented in future reports.

Commenting Organization: EGLE **Commenter:**
Section: 4.3 **Page #: 6**
Specific Comment #2: Describe the process for developing the isopach map that will be used for verification. Indicate if this isopach will be a grid or TIN and if either of the data sets used to create the isopach will be gridded prior to mapping. Alternatively, if the isopach will be a TIN surface comparison, indicate that all surfaces will be TINs. EGLE is concerned that averaging of the data into grids will occur on each of the comparison surveys and will be averaged a 3rd time on the isopach map.

Commenting Organization: EGLE **Commenter:**
Section: 5.0 **Page #: 9**
Specific Comment #3: Section 5.0 states that "At completion of the cofferdams, Forgen will assist the MDNR with fish shocking and salvaging." Please note that during a Crown Vantage Side Channel Remedial Action Progress Call on October 7, 2020, Wood stated that the MDNR confirmed that a fish salvage was not required, however due to the short turnaround time, MDNR was unable to verify field conditions. This modification should be documented in future reports.

Commenting Organization: EGLE **Commenter:**
Section: 5.0 **Page #: 10**
Specific Comment #4: This section states that each of the dredge cells will be divided using supersacks similar to the cofferdam at the inlet. The details for this are not in the 100 pct design plans or in the main RAWP text. Clarify the approach further to discuss when the sediment under these supersacks will be dredged, how long they will stay installed, and how the sediment will be managed during removal. Identify these supersacks on the design drawings or dredge and backfill plan along with the location of the dredge cells.

Commenting Organization: EGLE **Commenter:**
Section: 6.0 & 9.0 **Page #: 11 & 18**
Specific Comment #5: The Remedial Action Work Plan states that "…Forgen may elect to remove sediment in multiple dredge cells concurrently (e.g. dredging the upstream and downstream cells at the same time) depending upon production rates, equipment availability, schedule, and other factors." However, Section 6.0 does not discuss concurrently dredging multiple cells. Please add a description of this process to the work plan and specify any changes in the dredging process that will occur in this scenario. Further, Section 9.0 does not mention backfilling multiple dredge cells concurrently. Will dredge cells be backfilled individually? If not, please clarify.

Commenting Organization: EGLE **Commenter:**
Section: Figure 4-1 **Page #: N/A**

Specific Comment #6: The SPA figure is incomplete. According to the RAWP text, the SPA should include the following: Wheel wash areas, worker decontamination area, temporary wastewater treatment area and strategically placed concrete blocks/bins to control the process of stabilization and will include an off-loading ramp to receive loads of sediment. Add these items on the SPA figure in the dredge and backfill plan.